

PALM Intranet

LVCook 8/10/06

Application Number  

## IDS Flag Clearance for Application 10802643



Content	Mailroom Date	Entry Number	IDS Review	Last Modified	Reviewer
M844	2006-06-05	29	Y <input checked="" type="checkbox"/>	2006-08-10 11:32:04.0	LCook
M844	2005-11-10	18	Y <input checked="" type="checkbox"/>	2006-01-08 11:35:24.0	LCook
M844	2004-06-23	16	Y <input checked="" type="checkbox"/>	2006-01-08 11:35:24.0	LCook
M844	2004-06-18	15	Y <input checked="" type="checkbox"/>	2006-01-08 11:35:23.0	LCook
M844	2004-03-17	13	Y <input checked="" type="checkbox"/>	2006-01-08 11:35:23.0	LCook
<input type="button" value="Update"/>					

10/802,643  
L/cook 8/16/06.

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(FILE 'HOME' ENTERED AT 14:40:41 ON 10 AUG 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 14:41:09 ON 10  
AUG 2006

L1	1903 S MDA AND LDL
L2	1438 S L1 AND OXI?
L3	191 S L2 AND CORONARY?
L4	37 S L3 AND PD<1998
L5	15 DUPLICATE REMOVE L4 (22 DUPLICATES REMOVED)

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L4	37 S L3 AND PD<1998
L5	15 DUPLICATE REMOVE L4 (22 DUPLICATES REMOVED)

AN 1996:328443 BIOSIS  
DN PREV199699050799  
TI Autoantibodies against MDA-LDL in subjects with severe  
and minor atherosclerosis and healthy population controls.  
AU Van De Vijver, Lucy P. L.; Steyger, Roland; Van Poppel, Geert; Boer,  
Jolanda M. A.; Kruijssen, Dick A. C. M.; Seidell, Jacob C.; Princen, Hans  
M. G. [Reprint author]  
CS Gaubius Laboratory, TNO-PG, P.O. Box 2215, 2301 CE Leiden, Netherlands  
SO Atherosclerosis, (1996) Vol. 122, No. 2, pp. 245-253.  
CODEN: ATHSBL. ISSN: 0021-9150.  
DT Article  
LA English  
ED Entered STN: 26 Jul 1996  
Last Updated on STN: 27 Jul 1996  
AB Autoantibodies against oxidized low-density lipoprotein (LDL) have been reported to be associated with atherosclerosis. However, data are not consistent. We compared the titres of autoantibodies to malondialdehyde-modified LDL in three groups, a case group with angiographically documented severe coronary stenosis (gt 80% stenosis in at least 1 vessel. n = 47), a hospital control group with minor stenosis on the coronary angiography (lt 50% stenosis in all three major vessels. n = 47) and a healthy population control group with no history of coronary heart disease (n = 49). Age ranged from 26 to 68 years. Subjects were frequency-matched for gender distribution and storage time of the blood samples. No relevant differences in autoantibody titre between case and control groups were found. The mean autoantibody titres (+- S.D.) were 1.44 +- 1.82, 1.46 +- 1.40 and 1.62 +- 1.95 for cases, hospital controls and population controls, respectively. No correlations were found between autoantibody titre and age, number of cigarettes smoked and LDL or total cholesterol. Autoantibody titres were correlated with body mass index (r = 0.2) and high-density lipoprotein (HDL) (r = -0.2). Odds ratios (OR) were calculated by tertiles of autoantibody titres for the hospital control group and the population control group, respectively. Age-adjusted OR (95% confidence interval) for medium and high compared to low autoantibody titre were 0.76 (0.27-2.14) and 1.09 (0.39-2.95) for the comparison between cases and hospital controls and 1.09 (0.39-3.07) and 0.90 (0.32-2.56) for the comparison between cases and population controls. Adjustment for gender, body mass index, smoking habits and HDL yielded essentially the same results. This study does not support an association between autoantibody titres to oxidized LDL and the extent of coronary stenosis.  
CC Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Carbohydrates 10068  
Physiology - General 12002  
Metabolism - Lipids 13006  
Metabolism - Proteins, peptides and amino acids 13012  
Cardiovascular system - Blood vessel pathology 14508  
Immunology - Immunopathology, tissue immunology 34508  
IT Major Concepts  
Biochemistry and Molecular Biophysics; Cardiovascular Medicine (Human Medicine, Medical Sciences); Clinical Endocrinology (Human Medicine, Medical Sciences); Metabolism; Physiology  
IT Chemicals & Biochemicals  
MALONDIALDEHYDE  
IT Miscellaneous Descriptors  
BODY MASS INDEX; CORONARY STENOSIS; HIGH DENSITY LIPOPROTEIN;  
MALONDIALDEHYDE-MODIFIED LOW DENSITY LIPOPROTEIN OXIDATION  
ORGN Classifier  
Hominidae 86215  
Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia  
Organism Name  
human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 542-78-9 (MALONDIALDEHYDE)

AN 1996:328443 BIOSIS  
DN PREV199699050799  
TI Autoantibodies against MDA-LDL in subjects with severe  
and minor atherosclerosis and healthy population controls.  
AU Van De Vijver, Lucy P. L.; Steyger, Roland; Van Poppel, Geert; Boer,  
Jolanda M. A.; Kruijssen, Dick A. C. M.; Seidell, Jacob C.; Princen, Hans  
M. G. [Reprint author]  
CS Gaubius Laboratory, TNO-PG, P.O. Box 2215, 2301 CE Leiden, Netherlands  
SO Atherosclerosis, (1996) Vol. 122, No. 2, pp. 245-253.  
CODEN: ATHSBL. ISSN: 0021-9150.  
DT Article  
LA English  
ED Entered STN: 26 Jul 1996  
Last Updated on STN: 27 Jul 1996  
AB Autoantibodies against oxidized low-density lipoprotein (LDL) have been reported to be associated with atherosclerosis. However, data are not consistent. We compared the titres of autoantibodies to malondialdehyde-modified LDL in three groups, a case group with angiographically documented severe coronary stenosis (gt 80% stenosis in at least 1 vessel. n = 47), a hospital control group with minor stenosis on the coronary angiography (lt 50% stenosis in all three major vessels. n = 47) and a healthy population control group with no history of coronary heart disease (n = 49). Age ranged from 26 to 68 years. Subjects were frequency-matched for gender distribution and storage time of the blood samples. No relevant differences in autoantibody titre between case and control groups were found. The mean autoantibody titres (+- S.D.) were 1.44 +- 1.82, 1.46 +- 1.40 and 1.62 +- 1.95 for cases, hospital controls and population controls, respectively. No correlations were found between autoantibody titre and age, number of cigarettes smoked and LDL or total cholesterol. Autoantibody titres were correlated with body mass index (r = 0.2) and high-density lipoprotein (HDL) (r = -0.2). Odds ratios (OR) were calculated by tertiles of autoantibody titres for the hospital control group and the population control group, respectively. Age-adjusted OR (95% confidence interval) for medium and high compared to low autoantibody titre were 0.76 (0.27-2.14) and 1.09 (0.39-2.95) for the comparison between cases and hospital controls and 1.09 (0.39-3.07) and 0.90 (0.32-2.56) for the comparison between cases and population controls. Adjustment for gender, body mass index, smoking habits and HDL yielded essentially the same results. This study does not support an association between autoantibody titres to oxidized LDL and the extent of coronary stenosis.  
CC Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Carbohydrates 10068  
Physiology - General 12002  
Metabolism - Lipids 13006  
Metabolism - Proteins, peptides and amino acids 13012  
Cardiovascular system - Blood vessel pathology 14508  
Immunology - Immunopathology, tissue immunology 34508  
IT Major Concepts  
Biochemistry and Molecular Biophysics; Cardiovascular Medicine (Human Medicine, Medical Sciences); Clinical Endocrinology (Human Medicine, Medical Sciences); Metabolism; Physiology  
IT Chemicals & Biochemicals  
MALONDIALDEHYDE  
IT Miscellaneous Descriptors  
BODY MASS INDEX; CORONARY STENOSIS; HIGH DENSITY LIPOPROTEIN;  
MALONDIALDEHYDE-MODIFIED LOW DENSITY LIPOPROTEIN OXIDATION  
ORGN Classifier  
Hominidae 86215  
Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia  
Organism Name  
human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 542-78-9 (MALONDIALDEHYDE)

AN 1995:388142 BIOSIS  
DN PREV199598402442  
TI Detection of autoantibodies against oxidized low-density lipoproteins and of IgG-bound low density lipoproteins in patients with coronary artery disease.  
AU Boullier, Agnes; Hamon, Martial; Walters-Laporte, Evelyne; Martin-Nizart, Françoise; Mackereel, Regine; Fruchart, Jean-Charles; Bertrand, Michel; Duriez, Patrick [Reprint author]  
CS Dep. d'Etudes Recherches sur les lipoprotéines l'athérosclérose, SERLIA INSERM U325, Inst. Pasteur, Fac. Pharmacie, 1 rue du Professeur Calmette, BP 245, 59019 Lille Cedex, France  
SO Clinica Chimica Acta, (1995) Vol. 238, No. 1, pp. 1-10.  
CODEN: CCATAR. ISSN: 0009-8981.  
DT Article  
LA English  
ED Entered STN: 13 Sep 1995  
Last Updated on STN: 13 Sep 1995  
AB The role of oxidized low-density lipoprotein (ox-LDL) in the pathogenesis of atherosclerosis has been the object of intense investigation. It has been proposed that, due to the antigenic properties of ox-LDL, the anti-ox-LDL antibody titre could represent a useful index of in vivo LDL oxidation. On the other hand, LDL immune complexes (LDL-IC) have been demonstrated in patients with coronary disease and could play an atherogenic role. The goal of our study was to investigate anti-malondialdehyde (MDA)-LDL autoantibodies and LDL-IC in a cohort of patients with coronary artery disease. Seventy control subjects and 70 coronary angiographically documented patients were compared; in addition 32 healthy male nonsmokers were compared with 32 healthy male smokers (gt 10 cigarettes/day). All patients were matched for age and cholesterolemia. Enzyme-linked immunosorbent assay was used to measure anti-MDA-LDL autoantibodies and LDL-IC. Titres of anti-MDA-LDL autoantibodies were not larger in patients with documented coronary artery stenosis and in smokers than they were in controls and non-smokers. The titre of LDL-IC was not higher in patients with coronary artery stenosis than in controls. The results thus indicate that in populations matched for age and cholesterolemia the titres of anti-MDA-LDL autoantibodies and the titre of LDL-IC are not increased in patients suffering from coronary artery stenosis. Furthermore, cigarette smoking does not induce higher titres of anti-MDA-LDL autoantibodies in healthy patients.  
CC Genetics - Sex differences 03510  
Clinical biochemistry - General methods and applications 10006  
Comparative biochemistry 10010  
Biochemistry methods - General 10050  
Biochemistry studies - General 10060  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Sterols and steroids 10067  
Biochemistry studies - Carbohydrates 10068  
Biophysics - Methods and techniques 10504  
Biophysics - Molecular properties and macromolecules 10506  
Pathology - General 12502  
Pathology - Diagnostic 12504  
Metabolism - General metabolism and metabolic pathways 13002  
Metabolism - Lipids 13006  
Metabolism - Sterols and steroids 13008  
Metabolism - Proteins, peptides and amino acids 13012  
Metabolism - Metabolic disorders 13020  
Cardiovascular system - Anatomy 14502



Cardiovascular system - Physiology and biochemistry 14504  
Cardiovascular system - Heart pathology 14506  
Cardiovascular system - Blood vessel pathology 14508  
Blood - Blood and lymph studies 15002  
Psychiatry - Addiction: alcohol, drugs, smoking 21004  
Toxicology - General and methods 22501  
Immunology - General and methods 34502  
Immunology - Immunopathology, tissue immunology 34508

IT Major Concepts

Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Cardiovascular Medicine (Human Medicine, Medical Sciences); Cardiovascular System (Transport and Circulation); Clinical Chemistry (Allied Medical Sciences); Clinical Endocrinology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Metabolism; Methods and Techniques; Pathology; Psychiatry (Human Medicine, Medical Sciences); Toxicology

IT Miscellaneous Descriptors

ANALYTICAL METHOD; ANTIBODY TITER; CLINICAL BIOCHEMISTRY;  
CORONARY ARTERY STENOSIS; DIAGNOSTIC METHOD; ELISA; IMMUNE  
COMPLEXES; IMMUNOGLOBULIN G; PATHOGENESIS; SMOKING

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

AN 1992:163030 BIOSIS  
DN PREV199293085355; BA93:85355  
TI OXIDATIVE STATUS OF LIPOPROTEINS IN CORONARY DISEASE  
PATIENTS.  
AU LIU K [Reprint author]; CUDDY E; PIERCE G N  
CS DIV CARDIOVAS SCI, ST BONIFACE GEN HOSP RES CENT, 351 TACHE AVE, WINNIPEG,  
MANITOBA, CANADA R2H 2A6  
SO American Heart Journal, (1992) Vol. 123, No. 2, pp. 285-290.  
CODEN: AHJOA2. ISSN: 0002-8703.  
DT Article  
FS BA  
LA ENGLISH  
ED Entered STN: 31 Mar 1992  
Last Updated on STN: 1 Apr 1992  
AB Oxidized low-density lipoprotein (LDL) may play an  
important role in atherogenesis. The oxidative status of  
isolated LDL and very low-density lipoprotein (VLDL) were  
investigated in 23 patients with proven coronary disease and in  
23 healthy asymptomatic control subjects. Oxidized cholesterol  
(4-cholesten-3-one and 20  $\alpha$ -OH cholesterol) was identified in  
LDL and VLDL from both groups. The content of cholesterol and  
4-cholesten-3-one in LDL from patients was significantly  
increased in comparison with values from the control subjects. Lipid  
peroxidation, as assessed by malondialdehyde (MDA) formation,  
was barely detectable in native LDL and VLDL from the two  
groups. However, after incubation with a free radical-producing system,  
MDA levels in LDL from patients were significantly  
higher than those in control subjects. Lysine reactivity in LDL  
after incubation with an oxidizing agent, CuSO<sub>4</sub>, was similar  
between groups. However, lysine reactivity to CuSO<sub>4</sub> in VLDL from patients  
was less than that in control subjects. Our results suggest that  
LDL levels from patients with coronary disease have an  
elevated oxidized cholesterol content and are more susceptible  
to peroxidative modification. Conversely, the LDL apoprotein  
does not appear to have been oxidatively modified in these  
patients. The data are consistent with a role for oxidized  
LDL in coronary artery disease and indicate that the  
LDL lipid may be an important oxidation site.  
CC Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Sterols and steroids 10067  
Metabolism - Lipids 13006  
Metabolism - Sterols and steroids 13008  
Metabolism - Proteins, peptides and amino acids 13012  
Cardiovascular system - Heart pathology 14506  
Cardiovascular system - Blood vessel pathology 14508  
IT Major Concepts  
Cardiovascular Medicine (Human Medicine, Medical Sciences); Metabolism  
IT Miscellaneous Descriptors  
HUMAN LOW DENSITY LIPOPROTEIN CHOLESTEROL CONTENT ATHEROGENESIS  
ORGN Classifier  
Hominidae 86215  
Super Taxa  
Primates; Mammalia; Vertebrata; Chordata; Animalia  
Taxa Notes  
Animals, Chordates, Humans, Mammals, Primates, Vertebrates  
RN 57-88-5 (CHOLESTEROL)

ANSWER 12 OF 23 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

AN 97365312 EMBASE

DN 1997365312

TI Effect of captopril on plasma oxidize-modified low density lipoprotein in patients with coronary heart disease.

AU Yunling X.; Qixing P.; Haiqing G.

CS X. Yunling, Shangdong Med. Univ. Affiliat. Hosp., Jinan 250012, China

SO Chinese Journal of Cardiology, (1997) Vol. 25, No. 4, pp.

271-273. .

Refs: 7

ISSN: 0253-3758 CODEN: CHHCDF

CY China

DT Journal; Article

FS 018 Cardiovascular Diseases and Cardiovascular Surgery

037 Drug Literature Index

LA Chinese

SL English; Chinese

ED Entered STN: 18 Dec 1997

Last Updated on STN: 18 Dec 1997

AB Objective: Oxidize-modified low density lipoprotein (Ox-LDL) plays an important role in the pathogenesis of atherosclerosis. This study was to evaluate the antioxidant-effect of captopril in depressing the ox-LDL level in patients with coronary heart disease (CHD). Methods: Thirty CHD patients and thirty sex and age-matched normal controls were selected. The patients were administrated with captopril in a dosage of 12.5 mg twice daily for 3 months. The morning venous blood was collected to determine the malondialdehyde (MDA) and superoxide dismutase (SOD) before administration and 1, 3 months after. Results: The levels of Ox-LDL and MDA of patients group were significantly higher than those of the controls. The Ox-LDL ( $\mu\text{g/dl}$ ) levels after 1 and 3 months of the administration were declined significantly compared with before ( $47.20 \pm 19.46$  vs  $58.54 \pm 24.88$ ,  $P < 0.05$ ;  $44.76 \pm 20.47$  vs  $58.54 \pm 24.88$ ,  $P < 0.05$ ), the MDA ( $\text{mmol/L}$ ) level changed in a similar trend ( $7.17 \pm 2.71$  vs  $9.79 \pm 3.65$ ,  $P < 0.01$ ;  $5.75 \pm 2.88$  vs  $9.79 \pm 3.65$ ,  $P < 0.01$ ). There was no obvious change in SOD activity. Conclusion: (1) Captopril may carry out antioxidant effect to suppress the level of Ox-LDL in CHD patients. (2) The administration of captopril in a dosage of 12.5 mg twice daily for 1 month may restore the elevated Ox-LDL level of CHD patients to the normal range.

CT Medical Descriptors:

\*coronary artery disease: DT, drug therapy

article

atherosclerosis

blood sampling

drug blood level

drug effect

human

venous blood

Drug Descriptors:

\*captopril: DO, drug dose

\*captopril: DT, drug therapy

\*captopril: PD, pharmacology

\*low density lipoprotein: CR, drug concentration

antioxidant

malonaldehyde: CR, drug concentration

superoxide dismutase: CR, drug concentration

RN (captopril) 62571-86-2; (malonaldehyde) 542-78-9; (superoxide dismutase) 37294-21-6, 9016-01-7, 9054-89-1

ANSWER 12 OF 23 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

AN 97365312 EMBASE

DN 1997365312

TI Effect of captopril on plasma oxidize-modified low density lipoprotein in patients with coronary heart disease.

AU Yunling X.; Qixing P.; Haiqing G.

CS X. Yunling, Shangdong Med. Univ. Affiliat. Hosp., Jinan 250012, China

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271-273. .

Refs: 7

ISSN: 0253-3758 CODEN: CHHCDF

CY China

DT Journal; Article

FS 018 Cardiovascular Diseases and Cardiovascular Surgery

037 Drug Literature Index

LA Chinese

SL English; Chinese

ED Entered STN: 18 Dec 1997

Last Updated on STN: 18 Dec 1997

AB Objective: Oxidize-modified low density lipoprotein (Ox-LDL) plays an important role in the pathogenesis of atherosclerosis. This study was to evaluate the antioxidant-effect of captopril in depressing the ox-LDL level in patients with coronary heart disease (CHD). Methods: Thirty CHD patients and thirty sex and age-matched normal controls were selected. The patients were administrated with captopril in a dosage of 12.5 mg twice daily for 3 months. The morning venous blood was collected to determine the malondialdehyde (MDA) and superoxide dismutase (SOD) before administration and 1, 3 months after. Results: The levels of Ox-LDL and MDA of patients group were significantly higher than those of the controls. The Ox-LDL ( $\mu\text{g/dl}$ ) levels after 1 and 3 months of the administration were declined significantly compared with before ( $47.20 \pm 19.46$  vs  $58.54 \pm 24.88$ ,  $P < 0.05$ ;  $44.76 \pm 20.47$  vs  $58.54 \pm 24.88$ ,  $P < 0.05$ ), the MDA ( $\text{mmol/L}$ ) level changed in a similar trend ( $7.17 \pm 2.71$  vs  $9.79 \pm 3.65$ ,  $P < 0.01$ ;  $5.75 \pm 2.88$  vs  $9.79 \pm 3.65$ ,  $P < 0.01$ ). There was no obvious change in SOD activity. Conclusion: (1) Captopril may carry out antioxidant effect to suppress the level of Ox-LDL in CHD patients. (2) The administration of captopril in a dosage of 12.5 mg twice daily for 1 month may restore the elevated Ox-LDL level of CHD patients to the normal range.

CT Medical Descriptors:

\*coronary artery disease: DT, drug therapy

article

atherosclerosis

blood sampling

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human

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Drug Descriptors:

\*captopril: DO, drug dose

\*captopril: DT, drug therapy

\*captopril: PD, pharmacology

\*low density lipoprotein: CR, drug concentration

antioxidant

malonaldehyde: CR, drug concentration

superoxide dismutase: CR, drug concentration

RN (captopril) 62571-86-2; (malonaldehyde) 542-78-9; (superoxide dismutase) 37294-21-6, 9016-01-7, 9054-89-1

d his

(FILE 'HOME' ENTERED AT 15:28:02 ON 10 AUG 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 15:28:23 ON 10 AUG 2006

L1 81 S (MDA LDL)AND OXLDL?  
L2 4 S L1 AND MYOCARDIA?  
L3 1 DUPLICATE REMOVE L2 (3 DUPLICATES REMOVED)  
L4 1460 S LDL AND MDA AND OX?  
L5 62 S L4 AND MYOCARDIA?  
L6 27 DUPLICATE REMOVE L5 (35 DUPLICATES REMOVED)  
L7 6 S L6 AND PD<1999  
L8 26 S L1 AND DISEASE?  
L9 14 DUPLICATE REMOVE L8 (12 DUPLICATES REMOVED)  
L10 6 S L1 AND CORONARY?  
L11 4 DUPLICATE REMOVE L10 (2 DUPLICATES REMOVED)  
L12 4 S L1 AND ANGINA?  
L13 2 DUPLICATE REMOVE L12 (2 DUPLICATES REMOVED)  
L14 0 S L1 AND INFRACTION?  
L15 10 S L1 AND HEART?  
L16 5 DUPLICATE REMOVE L15 (5 DUPLICATES REMOVED)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 15:45:22 ON 10 AUG 2006

L17 26452 S LDL AND (CORONARY)  
L18 255 S L17 AND MDA?  
L19 4491 S L17 AND OXI?  
L20 193 S L18 AND L19  
L21 9 S L20 AND REVIEW?  
L22 6 DUPLICATE REMOVE L21 (3 DUPLICATES REMOVED)  
L23 51 S L20 AND PD<1999  
L24 23 DUPLICATE REMOVE L23 (28 DUPLICATES REMOVED)

=>

d his

(FILE 'HOME' ENTERED AT 15:28:02 ON 10 AUG 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 15:28:23 ON 10  
AUG 2006

L1 81 S (MDA LDL)AND OXLDL?  
L2 4 S L1 AND MYOCARDIA?  
L3 1 DUPLICATE REMOVE L2 (3 DUPLICATES REMOVED)  
L4 1460 S LDL AND MDA AND OX?  
L5 62 S L4 AND MYOCARDIA?  
L6 27 DUPLICATE REMOVE L5 (35 DUPLICATES REMOVED)  
L7 6 S L6 AND PD<1999  
L8 26 S L1 AND DISEASE?  
L9 14 DUPLICATE REMOVE L8 (12 DUPLICATES REMOVED)  
L10 6 S L1 AND CORONARY?  
L11 4 DUPLICATE REMOVE L10 (2 DUPLICATES REMOVED)  
L12 4 S L1 AND ANGINA?  
L13 2 DUPLICATE REMOVE L12 (2 DUPLICATES REMOVED)  
L14 0 S L1 AND INFRACTION?  
L15 10 S L1 AND HEART?  
L16 5 DUPLICATE REMOVE L15 (5 DUPLICATES REMOVED)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 15:45:22 ON 10  
AUG 2006

L17 26452 S LDL AND (CORONARY)  
L18 255 S L17 AND MDA?  
L19 4491 S L17 AND OXI?  
L20 193 S L18 AND L19  
L21 9 S L20 AND REVIEW?  
L22 6 DUPLICATE REMOVE L21 (3 DUPLICATES REMOVED)  
L23 51 S L20 AND PD<1999  
L24 23 DUPLICATE REMOVE L23 (28 DUPLICATES REMOVED)

=>

10/802,643  
LYC00K 8/14/06.

ANSWER 10 OF 12 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 3

AN 1996:119147 BIOSIS  
DN PREV199698691282  
TI Isolation and characterization of human antioxidized LDL  
autoantibodies.  
AU Mironova, Marina; Virella, G.; Lopes-Virella, Maria F. [Reprint author]  
CS Ralph H. Johnson VA Medical Cent., 109 Bee St., Charleston, SC 29401, USA  
SO Arteriosclerosis Thrombosis and Vascular Biology, (1996) Vol. 16, No. 2,  
pp. 222-229.  
ISSN: 1079-5642.  
DT Article  
LA English  
ED Entered STN: 27 Mar 1996  
Last Updated on STN: 27 Mar 1996  
AB Autoantibodies to oxidized LDL have been reported in  
normal subjects and in patients with arteriosclerosis, but their possible  
pathogenic role is not yet well defined. One important problem is the  
existence of contradictory data reported by different groups concerning  
the associations between antioxidized LDL autoantibodies and the  
presence or progression of arteriosclerotic lesions. Such contradictions  
led us to decide to isolate and characterize antioxidized LDL  
antibodies by affinity chromatography with the use of  
oxidized LDL cross-linked to Sepharose. Antioxidized  
LDL antibodies were isolated from selected serum samples  
obtained from eight subjects. Seven of them (six patients and one control  
subject) had high levels of antioxidized LDL antibody  
during screening. The other subject, a healthy volunteer, had a low level  
of antibody. All purified antibodies contained IgG  
(of subclasses 1 and 3) as the predominant isotype and were primarily  
specific for oxidized LDL but showed some  
cross-reactivity with malondialdehyde-modified LDL and native  
LDL. Two of the purified antibodies cross-reacted with  
cardiolipin. We determined average dissociation constants for the  
antioxidized LDL antibodies purified from five  
individuals, which varied between 2.4 times  $10^{-7}$  and 7.5 times  $10^{-7}$  mol/L,  
whereas the average dissociation constant of rabbit hyperimmune anti-  
LDL antibody was determined to be 2.7 times  $10^{-8}$  mol/L.  
In conclusion, we have purified human autoantibodies reactive with  
oxidized LDL that appear to be predominantly of  
moderate-to-low affinity and of variable cross-reactivity. The  
predominance of IgG1 and IgG3 antibodies is significant from the  
standpoint of potential pathogenicity, since these two subclasses activate  
the classic complement pathway system and have the highest binding  
affinities for Fc-gamma receptors on phagocytic cells.  
CC Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Carbohydrates 10068  
Metabolism - Lipids 13006  
Metabolism - Proteins, peptides and amino acids 13012  
Cardiovascular system - Blood vessel pathology 14508  
Immunology - Immunopathology, tissue immunology 34508  
IT Major Concepts  
Cardiovascular Medicine (Human Medicine, Medical Sciences); Clinical  
Endocrinology (Human Medicine, Medical Sciences); Metabolism  
IT Miscellaneous Descriptors  
ARTERIOSCLEROSIS; IMMUNOGLOBULIN G; LOW DENSITY LIPOPROTEIN  
ORGN Classifier  
Hominidae 86215  
Super Taxa  
Primates; Mammalia; Vertebrata; Chordata; Animalia  
Organism Name  
Hominidae  
Taxa Notes

AN 1996:119147 BIOSIS  
DN PREV199698691282  
TI Isolation and characterization of human antioxidized LDL autoantibodies.  
AU Mironova, Marina; Virella, G.; Lopes-Virella, Maria F. [Reprint author]  
CS Ralph H. Johnson VA Medical Cent., 109 Bee St., Charleston, SC 29401, USA  
SO Arteriosclerosis Thrombosis and Vascular Biology, (1996) Vol. 16, No. 2, pp. 222-229.  
ISSN: 1079-5642.  
DT Article  
LA English  
ED Entered STN: 27 Mar 1996  
Last Updated on STN: 27 Mar 1996  
AB Autoantibodies to oxidized LDL have been reported in normal subjects and in patients with arteriosclerosis, but their possible pathogenic role is not yet well defined. One important problem is the existence of contradictory data reported by different groups concerning the associations between antioxidized LDL autoantibodies and the presence or progression of arteriosclerotic lesions. Such contradictions led us to decide to isolate and characterize antioxidized LDL antibodies by affinity chromatography with the use of oxidized LDL cross-linked to Sepharose. Antioxidized LDL antibodies were isolated from selected serum samples obtained from eight subjects. Seven of them (six patients and one control subject) had high levels of antioxidized LDL antibody during screening. The other subject, a healthy volunteer, had a low level of antibody. All purified antibodies contained IgG (of subclasses 1 and 3) as the predominant isotype and were primarily specific for oxidized LDL but showed some cross-reactivity with malondialdehyde-modified LDL and native LDL. Two of the purified antibodies cross-reacted with cardiolipin. We determined average dissociation constants for the antioxidized LDL antibodies purified from five individuals, which varied between 2.4 times  $10^{-7}$  and 7.5 times  $10^{-7}$  mol/L, whereas the average dissociation constant of rabbit hyperimmune anti-LDL antibody was determined to be 2.7 times  $10^{-8}$  mol/L. In conclusion, we have purified human autoantibodies reactive with oxidized LDL that appear to be predominantly of moderate-to-low affinity and of variable cross-reactivity. The predominance of IgG1 and IgG3 antibodies is significant from the standpoint of potential pathogenicity, since these two subclasses activate the classic complement pathway system and have the highest binding affinities for Fc-gamma receptors on phagocytic cells.  
CC Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Lipids 10066  
Biochemistry studies - Carbohydrates 10068  
Metabolism - Lipids 13006  
Metabolism - Proteins, peptides and amino acids 13012  
Cardiovascular system - Blood vessel pathology 14508  
Immunology - Immunopathology, tissue immunology 34508  
IT Major Concepts  
Cardiovascular Medicine (Human Medicine, Medical Sciences); Clinical Endocrinology (Human Medicine, Medical Sciences); Metabolism  
IT Miscellaneous Descriptors  
ARTERIOSCLEROSIS; IMMUNOGLOBULIN G; LOW DENSITY LIPOPROTEIN  
ORGN Classifier  
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Primates; Mammalia; Vertebrata; Chordata; Animalia  
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Animals, Chordates, Humans, Mammals, Primates, Vertebrates

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STN

AN 1998:257615 BIOSIS

DN PREV199800257615

TI Production and characterization of monoclonal antibodies to  
oxidized LDL.

AU Choi, Kyungho; Lee, Hyun Soon; Chung, Hong Keun [Reprint author]

CS Dep. Biochem., Seoul Natl. Univ. Coll. Med., Seoul, South Korea

SO Experimental and Molecular Medicine, (March 31, 1998) Vol. 30, No. 1, pp.  
41-45. print.

DT Article

LA English

ED Entered STN: 9 Jun 1998

Last Updated on STN: 9 Jun 1998

AB Oxidized low density lipoprotein (LDL) seems to take a part in  
atherogenesis through direct interactions with macrophages, endothelial  
cells, and smooth muscle cells, and is thought to participate in renal  
glomerular injury. For the purpose of illustrating the role of oxidized  
LDL in the human diseases, monoclonal antibodies were  
developed and characterized, recognizing oxidized LDL-specific  
epitopes that do not exist on native LDL. LDL was  
oxidized by the incubation with CuSO<sub>4</sub>, and used as immunogen. Splenocytes  
from the immunized mouse and mouse myeloma cells were fused to produce  
hybridomas, which were screened for the secretion of oxidized LDL  
-specific antibodies. Immunoblot analysis and binding  
affinity assay showed that these monoclonal antibodies  
recognize malondialdehyde-conjugated peptide epitopes.

CC Immunology - Immunopathology, tissue immunology 34508

Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Lipids 10066

Biophysics - Molecular properties and macromolecules 10506

Cardiovascular system - Blood vessel pathology 14508

Blood - Blood cell studies 15004

Blood - Lymphatic tissue and reticuloendothelial system 15008

Immunology - General and methods 34502

IT Major Concepts

Biochemistry and Molecular Biophysics; Immune System (Chemical  
Coordination and Homeostasis)

IT Parts, Structures, & Systems of Organisms

endothelial cells: circulatory system; macrophages: blood and  
lymphatics, immune system; smooth muscle cells: muscular system;  
splenocytes: blood and lymphatics

IT Diseases

renal glomerular injury: injury, urologic disease

IT Chemicals & Biochemicals

oxidized low density lipoprotein; LDL [low density  
lipoprotein]

IT Miscellaneous Descriptors

atherogenesis; binding affinity assay: analytical  
method; immunoblot analysis: analytical method

ORGN Classifier

Muridae 86375

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

mouse

SP2: mouse myeloma cell

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,  
Rodents, Vertebrates

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